

BELLSOUTH

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Vice President-
Federal Regulatory

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August 2, 2000

Mr. Dale N. Hatfield
Federal Communications Commission
445 12th Street SW, Room 7-C155
Washington, D.C. 20554

RE: Final Service Disruption Report

Dear Mr. Hatfield:

Pursuant to the requirements of the Commission's Order in CC Docket 91-273, released February 27, 1992, BellSouth Telecommunications, Incorporated submits a Final Service Disruption Report for a service outage that occurred on July 3, 2000.

The attached final report completes our response on the July 3, 2000 outage. It includes an update of the information previously provided in the 72-Hour Service Disruption Report that was sent to the Commission's Watch Office on the July 3, 2000.

If you have any questions concerning this report, please contact the undersigned.

Sincerely,



Ben G. Almond
Vice President-Federal Regulatory

Attachment

cc: Robert Kimball

FINAL SERVICE DISRUPTION REPORT

This Final Service Disruption report is filed by BellSouth Telecommunications Inc., in accordance with both the First and Second Report and Order Amendment of Part 63.100 of the Federal Communications Commission's rules. A 72-hour Initial Service Disruption Report for this July 3, 2000 outage in New Orleans-Riverside, Louisiana was filed with the FCC Watch Officer on July 3, 2000.

GEOGRAPHIC AREA AFFECTED:

This service outage affected the metropolitan business and residential customers served in the New Orleans-Riverside central office in LATA 490 in Louisiana.

DURATION OF OUTAGE:

This outage began at 12:07:26 PM CDT and ended at 12:47:30 PM CDT for a total duration of 40 minutes 4 seconds.

ESTIMATED NUMBER OF CUSTOMERS AFFECTED:

There were approximately 49,194 customers affected during this service disruption.

TYPES OF SERVICE AFFECTED:

Inter-Office, Intra-LATA, Inter-LATA and LIDB/800 services were affected during this SS7 isolation.

ESTIMATED NUMBER OF BLOCKED CALLS:

There were approximately 62,828 blocked calls during this service outage.

APPARENT OR KNOWN CAUSE OF THE INCIDENT:

Root cause analysis determined the two "T" carriers transporting the SS7 A-links for this central office were both timed from one TOCA pack in the DCD400. In addition, the DCD400 failed to switch the TOCA card in slot one to protect when it became defective.

ROOT CAUSE:

Process Error – Telco (CCS7 A-Link diversity)

METHODS USED TO RESTORE SERVICE:

At 12:07:26PM CDT, the New Orleans-Riverside, LA EWSD switch became SS7 isolated. BellSouth established a maintenance bridge at 12:15PM CDT to determine the point of failure. It was determined there were DCD400 clock alarms in office. The SS7 isolation ended at 12:47:30 PM CDT when the standby TOCA DCD400 clock card was swapped with the active card.

STEPS TO PREVENT RECURRENCE:

BellSouth rewired timing for one of the "T" carriers to another slot on the DCD400 on July 13, 2000 ensuring diverse timing feeds to each SS7 A links.

In addition, BellSouth replaced the defective TOCA pack on July 4, 2000, and performed a manual and automatic switch test of the DCD400. In addition the MCA switch card was upgraded to an MCA-2 card (which controls the TOCA cards being able to switch to protect). Manual and automatic switch tests were completed and passed.

EVALUATION OF EFFECTIVENESS AND APPLICATION OF NRC RECOMMENDATIONS AND BEST PRACTICES

Having reviewed the Network Reliability Council's Compendium of Technical Papers, Section B, Signaling Network Systems, best addresses this service disruption. Paragraph 5.2.7.1.1 speaks to A-Link Diversity and references Paragraph 6 (which contains recommendations and best practices for maintaining CCS7 link diversity). In Paragraph 6.2.1.5, it refers to the CCS Signaling Link Element Diversity guidelines contained in Appendix 7. Specifically, Page 4 includes the Timing/Synchronization Equipment Checklist, and Item 6 calls for a check-off on the "timing feed to each CCS Link from different output card on the bits or secondary clocks".



☐ 120 Minute Initial Report

SERVICE DISRUPTION

☒ 72 Hour Initial Report

00-101

TO:
FCC Watch Officer
Washington, D. C.

FAX No.: (202)-418-2812
or
FAX No.: (202)-418-2813
Tel. No.: (202)-632-6975

OR

TO:
FCC Watch Officer
Columbia Operations Center
Columbia, Maryland

FAX No.: (301)-725-2521
Tel. No.: (301)-725-2278

FROM:
BellSouth Telecommunications

Reported Initiated By: Mike White
Contact No.: (404-321-2516)

Date of Incident: 7/3/2000 **Time of Incident:** 12:07:26 AM ☐ EST ☐
PM ☒ CST ☐
Date of BST's Knowledge of Incident: 7/3/2000 **Time of Knowledge:** 12:07:26 AM ☐ EST ☐
PM ☒ CST ☐

Estimated Number of Customers Affected: **Actual:** 49,194 **Potential:** 49,194

Duration of Incident: 40 minutes and 4 seconds **Estimated Number of Blocked Calls:** 62,828

Geographic Area:		Types of Services Affected:	
City: <u>New Orleans</u>		<input type="checkbox"/> Intra-Office	<input type="checkbox"/> 911
State: <u>Louisiana</u>		<input checked="" type="checkbox"/> Inter-Office	<input type="checkbox"/> Congestion
CLLI: <u>NWORLARVDS0</u>		<input checked="" type="checkbox"/> Intra-LATA	<input type="checkbox"/> Operator Services
LATA #: <u>490</u>		<input checked="" type="checkbox"/> Inter-LATA	<input type="checkbox"/> LIDB/800
<input type="checkbox"/> Rural	<input checked="" type="checkbox"/> Metro	<input type="checkbox"/> Suburban	
Switch Types:		Category of Incident Which Makes this Reportable:	
<input type="checkbox"/> ATT 1AESS	<input type="checkbox"/> NTI DMS 200	<input type="checkbox"/> Local Switch	<input checked="" type="checkbox"/> SS7
<input type="checkbox"/> ATT SESS	<input type="checkbox"/> NTI STP	<input type="checkbox"/> TOPS	<input type="checkbox"/> Congestion
<input type="checkbox"/> ATT STP	<input checked="" type="checkbox"/> Siemens EWSD	<input type="checkbox"/> Tandem (Local)	<input type="checkbox"/> Facility
<input type="checkbox"/> NTI DMS 100	<input type="checkbox"/> Ericsson STP	<input type="checkbox"/> Tandem (LATA)	<input type="checkbox"/> Special 911
<input type="checkbox"/> NTI DMS 100/200	<input type="checkbox"/> Alcatel STP		<input type="checkbox"/> >50,000 Lines
<input type="checkbox"/> OTHER:			<input type="checkbox"/> 30,000 to 49,999 Lines
			<input type="checkbox"/> Fire
			<input type="checkbox"/> FAA/Media Attention

Apparent or Known Cause of Incident: Failure of external timing supply.

Methods to Restore Service: Replaced circuit pack in external timing supply.

Steps to Prevent Recurrence: To Be Determined

BST Contact: <u>B. G. Almond</u> <u>Director - Federal Regulatory</u> Tel. #: <u>(202)-463-4112</u> FAX #: <u>(202)-463-4198</u>	Date Faxed to FCC: _____ Time Reported To FCC: _____ AM <input type="checkbox"/> EST <input type="checkbox"/> PM <input type="checkbox"/> CST <input type="checkbox"/> FCC Contact: _____
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